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Operations and Services Public Weather Services NWSPD 10-5 WFO Non-Precipitation Weather Products Specification NWSI 10-515

Central Region Non-Precipitation Weather Products Specification

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OPR: H. James Kæney, W/CR1x1 **Certified by:** J. Michael Looney, W/CR1

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(Signed by Dennis H. McCarthy) 8/25/03
Dennis H. McCarthy Date
Regional Director

WFO Non-Precipitation Weather Products Specification

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- 1. <u>Introduction</u>. This supplement describes regionally defined variations to <u>NWSI 10-515</u>.
- 2. Non-Precipitation Storm Outlook (product category SPS).
- 2.1 <u>Issuance Guidelines</u>. In Central Region, the Hazardous Weather Outlook (product category HWO) is the preferred product to convey non-precipitation event potential.
- 2.1.1 <u>Issuance Criteria</u>. Hazardous Weather Outlooks are described in the Central Region Supplement with <u>NWSI 10-517</u> (Multi-Purpose Weather Products Specification).
- 3. Non-Precipitation Watches (product category NPW).
- 3.1. <u>Issuance Guidelines.</u> WFOs should issue a Non-Precipitation Watch when conditions are favorable for a hazardous non-precipitation weather event to develop over part or all of the forecast area, but the occurrence is uncertain. If the forecaster is highly confident that the event will occur (e.g., greater than 80% confident), the forecaster should issue a warning as described in 5.2.2 of NWSI 10-515 and 4.1.1 of this Supplement.
- 4. <u>Non-Precipitation Weather Warnings (product category NPW)</u>.
- 4.1 Issuance Guidelines. See NWSI 10-515
- 4.1.1 <u>Issuance Criteria.</u> In Central Region, supplemental warning criteria applicable to issuing non-precipitation weather warnings are defined as follows (i.e., 5.2.2.1 of <u>NWSI 10-515</u>). Refer to CRH intranet (<u>http://crh-1.crh.noaa.gov/</u>) for WFO-specific non-precipitation warning criteria.
- 4.1.1.1 Non-Precipitation Weather Warnings Products.

A. Excessive Heat Warnings - An Excessive Heat Warning (NPW) should be issued when the following conditions are expected for at least the next 24-hour period:

- The Heat Index (HI) is expected to be at least 115 for 3 hours or more and the overnight minimum temperature is/was around 80 degrees or higher. Around 80 means that, at forecaster discretion, minimum temperature can drop to the upper 70s and still require an Excessive Heat Warning.
- Central Region guideline values for Excessive Heat Warnings (above) may be locally adjusted, especially adjusted downward for metropolitan areas, where certain groups, (e.g., elderly people shut inside without air conditioning), place themselves at a significantly higher risk. Locally adjusted thresholds should be approved by the Chief, Services (W/CR1), prior to implementation.

The MIC at the state liaison WFO should ensure that this program is coordinated with the appropriate state health and emergency management officials. If the state chooses not to develop

a suitable comprehensive plan, then Central Region offices should limit their action to forecasting the event, highlighting it in statements, and disseminating prepared safety information. With the exception of large metropolitan areas, WFOs should not deal with cities individually.

- B. Freeze Warnings The freeze/frost season is defined by the WFO Meteorologist in Charge or designee.
- C. High Wind Warnings A High Wind Warning should be issued when one of the following is anticipated:
 - Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration except mountain areas in Colorado, Wyoming, and eastern Utah.
 - Mountain areas in Colorado, Wyoming, and eastern Utah.
 - 1. Sustained winds of 50 mph or greater lasting 1 hour or longer, or
 - 2. Sustained winds or gusts of 75 mph or greater (for any duration).
- 5. Non-Precipitation Weather Advisories (product category NPW).
- 5.1 Issuance Guidelines. See NWSI 10-515
- 5.1.1 <u>Issuance Criteria.</u> Non-Precipitation Weather Advisory criteria should be established locally based on a thorough assessment of customer requirements. Refer to CRH intranet (http://crh-1.crh.noaa.gov/) for WFO-specific non-precipitation advisory criteria.
- 5.1.1.1 Non-Precipitation Weather Advisory Products.

A. Heat Advisory - A Heat Advisory should be issued when the following conditions are expected for at least the next 24-hour period: The Heat Index (HI) is expected to be at least 105 for 3 hours or more and the overnight minimum is/was around 80 degrees or higher. Around 80 means that, at forecaster discretion, minimum temperature can drop to the upper 70s and still require a Heat Advisory.

B. Lake Wind Advisory - Lake Wind Advisory threshold criteria may be lowered to 20 mph, as designated by the MIC and approved by the Chief, Services, W/CR1.

APPENDIX A - EXAMPLES

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<u>Introduction</u>. The following are examples of a non-precipitation watch, warning, and

1.

advisory.

2. Example 1 - Non-Precipitation Watch.

WWUS75 KGJT 012133 NPWGJT

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE GRAND JUNCTION CO 232 PM MST TUE APR 1 2003

...STRONG WINDS TO AFFECT EASTERN UTAH AND WESTERN COLORADO WEDNESDAY...

.A POWERFUL EARLY SPRING STORM WILL DIG INTO THE PACIFIC COAST TONIGHT AND INTO THE GREAT BASIN ON WEDNESDAY. BREEZY CONDITIONS WILL PERSIST TONIGHT...WITH WINDS INTENSIFYING WEDNESDAY AFTERNOON ACROSS THE HIGH VALLEYS AND MOUNTAINS OF EASTERN UTAH AND NORTHWEST COLORADO...AS THE STORM APPROACHES THE REGION. ISOLATED THUNDERSTORMS IN THE AFTERNOON COULD POTENTIALLY ENHANCE WIND GUSTS.

COZ003-004-009-013-017-UTZ023-025-028-020444EASTERN UINTA MOUNTAINS UT-ELKHEAD AND PARK MOUNTAINS CO-FLATTOPS COGRAND AND BATTLEMENT MESAS CO-LA SAL AND ABAJO MOUNTAINS UTROAN AND TAVAPUTS PLATEAUS CO-TAVAPUTS PLATEAU UTUNCOMPAHGRE PLATEAU/DALLAS DIVIDE COINCLUDING THE CITIES OF...MONTICELLO
232 PM MST TUE APR 1 2003

...HIGH WIND WATCH FOR WEDNESDAY...

SOUTHWEST WINDS WILL INCREASE THROUGH THE DAY. BY THE AFTERNOON WIND SPEEDS WILL AVERAGE 35 TO 55 MPH WITH GUSTS TO 75 MPH POSSIBLE OVER EXPOSED RIDGES AND PASSES. IN ADDITION...ISOLATED AFTERNOON THUNDERSTORMS COULD PRODUCE EVEN STRONGER GUSTS.

REMEMBER...A HIGH WIND WATCH MEANS CONDITIONS ARE FAVORABLE FOR A HIGH WIND EVENT IN AND CLOSE TO THE WATCH AREA.

MOTORISTS PLANNING TO TRAVEL WEDNESDAY ACROSS EASTERN UTAH AND THE HIGH COUNTRY OF WESTERN COLORADO SHOULD BE PREPARED FOR STRONG WINDS. BE ESPECIALLY CAUTIOUS IN HIGH-PROFILE VEHICLES OVER MOUNTAIN PASSES AND NARROW CANYONS.

\$\$

COZ001-002-007-008-020446CENTRAL COLORADO RIVER BASIN CO-CENTRAL YAMPA RIVER BASIN CODEBEQUE TO SILT CORRIDOR CO-LOWER YAMPA RIVER BASIN COINCLUDING THE CITIES OF...GLENWOOD SPRINGS AND CRAIG
232 PM MST TUE APR 1 2003

...HIGH WIND WATCH FOR WEDNESDAY...

SOUTHWEST WINDS WILL INCREASE THROUGH THE DAY. BY THE AFTERNOON WIND SPEEDS WILL AVERAGE 25 TO 45 MPH WITH GUSTS TO 60 MPH POSSIBLE. IN ADDITION...ISOLATED AFTERNOON THUNDERSTORMS COULD PRODUCE EVEN STRONGER GUSTS.

REMEMBER...A HIGH WIND WATCH MEANS CONDITIONS ARE FAVORABLE FOR A HIGH WIND EVENT IN AND CLOSE TO THE WATCH AREA.

MOTORISTS PLANNING TO TRAVEL WEDNESDAY ACROSS EASTERN UTAH AND THE HIGH COUNTRY OF WESTERN COLORADO SHOULD BE PREPARED FOR STRONG WINDS. BE ESPECIALLY CAUTIOUS IN HIGH-PROFILE VEHICLES OVER MOUNTAIN PASSES AND NARROW CANYONS.

3. Example 2 - Non Precipitation Freeze Warning.

WWUS73 KEAX 080745 NPWMCI

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE KANSAS CITY/PLEASANT HILL MO 246 AM CDT TUE APR 8 2003

KSZ025-057-060-102>105-MOZ001>008-011>017-020>025-028>033-037>040-043>046-053-054-091500-

ADAIR-ANDREW-ATCHISON-BATES-BUCHANAN-CALDWELL-CARROLL-CASS-CHARITON-CLAY-CLINTON-COOPER-DAVIESS-DE KALB-DONIPHAN-GENTRY-GRUNDY-HARRISON-HENRY-HOLT-HOWARD-JACKSON-JOHNSON-LAFAYETTE-LEAVENWORTH-LINN-LIVINGSTON-MACON-MERCER-MIAMI-NODAWAY-PETTIS-PLATTE-PUTNAM-RANDOLPH-RAY-SALINE-SCHUYLER-SULLIVAN-WORTH-WYANDOTTE-INCLUDING THE CITIES OF...ATCHISON...BETHANY...BOONVILLE...BUTLER...CHILLICOTHE...CLINTON...HARRISONVILLE...KANSAS CITY...KIRKSVILLE...MARSHALL...MARYVILLE...MOBERLY...OLATHE...PAOLA...ROCKPORT...SEDALIA...ST JOSEPH...TRENTON AND WARRENSBURG.

...FREEZE WARNING HAS BEEN ISSUED FOR THIS EVENING THROUGH WEDNESDAY MORNING...

COLD AIR WILL CONTINUE TO SINK SOUTH INTO THE AREA TONIGHT THROUGH WEDNESDAY MORNING. CLEARING SKIES AND LIGHT WINDS OVERNIGHT WILL ALLOW TEMPERATURES TO FALL BELOW THE FREEZING MARK AROUND MIDNIGHT AND PERSIST THROUGH SUNRISE ON WEDNESDAY MORNING. MANY LOCATIONS WILL EXPERIENCE A PERIOD OF SEVERAL HOURS WITH TEMPERATURES BELOW 28 DEGREES...RESULTING IN A KILLING FREEZE.

REMEMBER...A FREEZE WARNING MEANS HAZARDOUS WEATHER CONDITIONS ARE IMMINENT OR HIGHLY LIKELY.

A FREEZE WARNING IS ISSUED FOR THE FIRST OCCURRENCE OF TEMPERATURES AT OR BELOW 32 DEGREES EARLY IN THE GROWING SEASON(SPRING). TYPICALLY, TEMPERATURES OCCURRING AT OR BELOW 28 DEGREES FOR SEVERAL HOURS ARE NEEDED TO FREEZE WATER IN MOST PLANTS.

NOW IS THE TIME TO TAKE PRECAUTIONS TO PROTECT PLANTS THAT ARE SUSCEPTIBLE TO FREEZING TEMPERATURES. BRING THEM INDOORS IF POSSIBLE...OR COVER THEM WITH A TARP TO PROTECT THEM FROM THE COLD TEMPERATURES.

4. Example 3 - Non Precipitation Heat Warning.

WWUS45 KSTL 052030 NPWSTL

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE ST LOUIS MO 330 PM CDT SAT JUL 5 2003

.A HOT AND HUMID AIRMASS WILL REMAIN OVER THE REGION THROUGH SUNDAY.

ILZ098>102-MOZ052-060>065-060900CALHOUN IL-FRANKLIN MO-JEFFERSON MO-JERSEY IL-LINCOLN MO-MADISON ILMONROE IL-ST. CHARLES MO-ST. CLAIR IL-ST. LOUIS MO-ST. LOUIS CITY MOWARREN MOINCLUDING THE CITIES OF...BELLEVILLE...EDWARDSVILLE...ST. CHARLES...
ST. LOUIS AND UNION

243 PM CDT SAT JUL 5 2003

... EXCESSIVE HEAT WARNING THROUGH SUNDAY...

HOT AND HUMID CONDITIONS ARE EXPECTED THROUGH SUNDAY. DURING SUNDAY AFTERNOON...EXPECT HEAT INDICES AROUND 105 FOR SEVERAL HOURS.

ACTUAL AIR TEMPERATURES WILL BE IN THE MID 90S. NOT MUCH RELIEF IS EXPECTED DURING THE NIGHTTIME EITHER. OVERNIGHT LOWS WILL ONLY DROP INTO THE MID TO UPPER 70S.

REMEMBER...AN EXCESSIVE HEAT WARNING MEANS HAZARDOUS WEATHER CONDITIONS ARE IMMINENT OR HIGHLY LIKELY.

THE DURATION OF THE HEAT IS WHAT IS PARTICULARLY DANGEROUS TO HEAT SENSITIVE GROUPS...MAINLY THE ELDERLY...THE VERY YOUNG AND THE CHRONICALLY ILL. MEMBERS OF THESE GROUPS SHOULD STAY IN AIR CONDITIONING. MAKE SURE TO CHECK ON FAMILY AND NEIGHBORS OFTEN DURING THE VERY WARM AND HUMID WEATHER. IT IS BECAUSE OF THIS THAT AN ADVISORY IS UPGRADED TO AN EXCESSIVE HEAT WARNING WHEN THREE CONSECUTIVE DAYS OF DANGEROUS HEAT LEVELS ARE EXPECTED.

TAKE EXTRA CAUTION IF YOU PLAN ON BEING OUTDOORS...ESPECIALLY DURING THE AFTERNOON AND EARLY EVENING HOURS. MAKE SURE TO DRINK PLENTY OF NON-ALCOHOLIC LIQUIDS AND WEAR LOOSE FITTING... LIGHT COLORED CLOTHING. WEAR A HAT AND SUNBLOCK TO PREVENT SUNBURN. IF POSSIBLE...SPEND MORE TIME IN AIR CONDITIONED OR WELL VENTILATED PLACES.

5. Example 4 - Non Precipitation Wind Advisory.

WWUS73 KDLH 021915 NPWDLH

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE DULUTH MN 113 PM CST WED APR 2 2003

MNZ037-WIZ001-022200-CARLTON/SOUTH ST. LOUIS MN-DOUGLAS WI-INCLUDING THE CITIES OF...SUPERIOR AND DULUTH 113 PM CST WED APR 2 2003

...WIND ADVISORY IN EFFECT FOR THIS AFTERNOON...
A NORTHEAST WIND OF 30 MPH...GUSTING AT TIMES TO 40 MPH WILL AFFECT SOUTHERN ST. LOUIS...CARLTON AND DOUGLAS COUNTIES THIS AFTERNOON.

VEHICLES CAN BE DIFFICULT TO CONTROL AT TIMES IN THESE WINDS. MOTORISTS SHOULD BE ESPECIALLY CAUTIOUS WHILE CROSSING BRIDGES AND OVERPASSES.

6. Example 5 - Non Precipitation Dense Fog Advisory.

WWUS45 KFSD 082041 NPWFSD

URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE SIOUX FALLS SD 345 PM CDT TUE APR 8 2003

.HIGH PRESSURE WILL EXTEND FROM NEBRASKA NORTHEAST INTO THE NORTHERN PLAINS THROUGH TONIGHT...AND WILL PROVIDE THE AREA WITH LIGHT WINDS. WITH THE SNOW MELT ACROSS THE REGION...PLENTY OF LOW LEVEL MOISTURE WILL BE AROUND. THIS AMOUNT OF MOISTURE AND WIND WILL COMBINE TO PRODUCE WIDESPREAD FOG ACROSS THE AREA...MUCH OF WHICH WILL BE DENSE.

IAZ001>003-012>014-020>022-031-032-MNZ080-081-089-090-097-098-NEZ013-014-SDZ059>062-065>071-090900-

BON HOMME SD-BUENA VISTA IA-CHEROKEE IA-CLAY SD-CLAY IA-COTTONWOOD MN-DAKOTA NE-DAVISON SD-DICKINSON IA-DIXON NE-HANSON SD-HUTCHINSON SD-IDA IA-JACKSON MN-LINCOLN SD-LYON IA-MCCOOK SD-MINNEHAHA SD-MURRAY MN-NOBLES MN-O'BRIEN IA-OSCEOLA IA-PIPESTONE MN-PLYMOUTH IA-ROCK MN-SIOUX IA-TURNER SD-UNION SD-WOODBURY IA-YANKTON SD-

INCLUDING THE CITIES OF...BERESFORD...PONCA...WORTHINGTON...WINDOM... SLAYTON...PIPESTONE...LUVERNE...JACKSON...STORM LAKE...SPIRIT LAKE... SPENCER...SIOUX CITY...ROCK RAPIDS...ORANGE CITY...LE MARS... IDA GROVE...HAWARDEN...YANKTON...VERMILLION...SIOUX FALLS...PARKER... MITCHELL AND CANTON 345 PM CDT TUE APR 8 2003

313 111 021 102 1111 0 2003

...DENSE FOG ADVISORY AFTER MIDNIGHT THROUGH WEDNESDAY MORNING...

FOG WILL DEVELOP AFTER MIDNIGHT TONIGHT...AND BECOME LOCALLY DENSE WITH VISIBILITIES AROUND A QUARTER MILE. THE FOG WILL BEGIN TO DISSIPATE WEDNESDAY MORNING.

IN ADDITION TO THE DENSE FOG REDUCING VISIBILITIES...FOG CONDENSING ON THE RELATIVELY COLD SURFACES CAN MAKE ROADS SLIPPERY.

THE FOG SHOULD SLOWLY DISSIPATE THROUGH THE MORNING HOURS ON WEDNESDAY AS SOUTHWESTERLY WINDS INCREASE.

IF YOU ARE DRIVING...USE LOW BEAM HEADLIGHTS AND REDUCE SPEED IN THE DENSE FOG. ALLOW FOR EXTRA TIME TO REACH YOUR DESTINATION.